

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims:

1. (Currently Amended): A function carrier insertable from one side into a metal or plastic plate component said function carrier comprising a ~~functional element~~ having shaft and head parts and a rivet sleeve,

~~characterised in that~~ wherein

the rivet sleeve is movable in the axial direction of the shaft part along the shaft part and in that the ~~functional element~~ function carrier has a rounded concave fillet in the transition region between the shaft part and the head part forming a sliding surface for the deformation of the rivet sleeve into contact with a wall of a hole in the metal or plastic plate component.

2. (Currently Amended): Function carrier in accordance with claim 1,

~~characterised in that~~ wherein

the rivet sleeve has a tubular deformable region adjacent the head part and a ~~ring-like ring~~, at least substantially non-deformable region remote from the head part.

3. (Currently Amended): Function carrier in accordance with claim 1,

~~characterised in that~~ wherein

the rivet sleeve has a tubular deformable region adjacent the head part and a ~~ring-like ring~~ deformable region remote from the head part.

4. (Currently Amended): Function carrier in accordance with claim 1,

~~characterised in that~~ wherein

the end face of the rivet sleeve remote from the head part is arranged perpendicular to the longitudinal axis of the shaft part.

5. (Currently Amended): Function carrier in accordance with claim 4,

~~characterised in that~~ wherein

the said end face of the rivet sleeve is formed as a sliding surface.

6. (Currently Amended): Function carrier in accordance with claim 4,

~~characterised in that~~ wherein

the said end face of the rivet sleeve is formed for the transmission of rivet forces acting in the axial direction, but is not itself deformable or is at least substantially not deformable under the riveting forces.

7. (Currently Amended): Function carrier in accordance with claim 4,
~~characterised in that~~ wherein

the said end face is designed to take up torques which turn the rivet sleeve and bring about the deformation of the rivet sleeve.

8. (Currently Amended): Function carrier in accordance with claim 7,
~~characterised in that~~ wherein

the shaft part ~~of the functional element~~ has an outer thread, at least in the region adjacent to the concave fillet and in that the rivet sleeve has an internal thread corresponding thereto.

9. (Currently Amended): Function carrier in accordance with claim 1,
~~characterised in that~~ wherein

the shaft part ~~of the functional element~~ has a means for the transmission of torques at the end remote from the head part.

10. (Currently Amended): Function carrier in accordance with claim 9,
~~characterised in that~~ wherein

the means is a spigot having one or more side faces or longitudinal grooves.

11. (Currently Amended): Function carrier in accordance with claim 9,
~~characterised in that~~ wherein

the means has the form of a tool or wrench-receiving recess formed in the free end of the shaft part, for example in the form of an internal hexagon.

12. (Currently Amended): Function carrier in accordance with claim 1,
~~characterised in that~~ wherein

the shaft part ~~of the functional element~~ has a ring groove in the region directly ahead of the concave fillet, and in that ~~ring-like~~ a ring region of the rivet sleeve can be deformed into this ring groove.

13. (Currently Amended): Function carrier in accordance with claim 1,
~~characterised in that~~ wherein

the concave fillet is provided with features (24:100) providing security against rotation, for example with a plurality of recesses and/or noses distributed in the peripheral direction, and in that the rivet sleeve can be brought by the deformation into a form-fitted connection with these features (24; 100) providing security against rotation.

14. (Currently Amended): Function carrier in accordance with claim 1,

~~characterised in that~~ wherein

the end face of the head part remote from the shaft part is equipped with features providing security against rotation, ~~for example noses providing security against rotation and/or recesses.~~

15. (Currently Amended): Function carrier in accordance with claim 3,

~~characterised in that~~ wherein

the ~~ring-like ring~~ region of the rivet sleeve has, when considered in a radial section, at least substantially the shape of a right-angled triangle, the outer side of which is arranged obliquely to the end face of the rivet sleeve remote from the head part and to the inner face of the rivet sleeve adjacent the shaft part.

16. (Currently Amended): Function carrier in accordance with claim 1,

~~characterised in that~~ wherein

the tubular region of the rivet sleeve has an inner wall which represents an axial continuation of the inner surface of the ~~ring-like ring~~ region of the rivet sleeve.

17. (Currently Amended): Function carrier in accordance with claim 1,

~~characterised in that~~ wherein

the tubular region of the rivet sleeve is at least substantially rectangular when considered in radial section, with the tubular region having an inner wall, which represents an axial continuation of the inner surface of the ~~ring-like ring~~ region of the rivet sleeve and in that the ~~ring-like ring~~ region of the rivet sleeve forms a ring shoulder at its outer side with the adjacent side of the ~~ring-like ring~~ region.

18. (Currently Amended): Function carrier in accordance with claim 1,

~~characterised in that~~ wherein

the ~~functional element~~ function carrier is formed as a bolt element.

19. (Currently Amended): Function carrier in accordance with claim 1,

~~characterised in that~~ wherein

the ~~functional element~~ function carrier is formed as a nut element, i.e. at least the shaft part is made hollow and this and/or the head part is formed with an internal thread or can be provided with an internal thread.

20. (Currently Amended): Component assembly in accordance with claim 1, ~~characterised in that~~ wherein

the hole of the metal or plastic plate ~~the plate-like component has a hole~~, the diameter of which corresponds at least substantially to that of the head part and in that the deformed, tubular region of the rivet sleeve, at the inner side, contacts the concave fillet in at least substantially flush manner, projects radially outwardly beyond the edge of the head part of the ~~functional element~~ function carrier and forms a ring groove with the ~~ring-like~~ ring region which accommodates the marginal region of the hole of the component.

21. (Currently Amended): Component assembly comprising a metal or plastic plate component, ~~for example a sheet metal part or a plastic part~~ and a function carrier in accordance with one or more of the preceding claims, ~~characterised in that~~ wherein

the component has a ~~pot-like~~ pot recess, the diameter of which corresponds at least substantially to that of the head part and the base of which is contacted by the end face of the head part remote from the shaft part in a manner secured against rotation and in that the deformed tubular region of the rivet sleeve at least substantially flushly contacts the concave fillet at the inner side, projects radially outwardly over the edge of the head part of the ~~functional element~~ function carrier and projects into the side wall of the ~~pot-like~~ pot recess of the component and is received there in a form-fitted manner.

22. (Currently Amended): Component assembly in accordance with claim 21, ~~characterised in that~~ wherein

the end face of the rivet sleeve remote from the head part is either arranged flush with the surface of the component remote from the head part or sunk into this surface, with the ~~ring-like~~ ring region of the rivet sleeve optionally projecting into a possibly present groove of the shaft part and optionally having, in the region of this groove, a conical alignment aid arranged concentric to the shaft part for a component to be mounted.

23. (Currently Amended): Method of inserting a function carrier into a metal or plastic plate ~~plate-like~~ component to form a component assembly, wherein the

~~functional-element~~ function carrier includes a shaft, head parts and a rivet sleeve and wherein the rivet sleeve is movable in the axial direction of the shaft part along the shaft and wherein the ~~functional-element~~ function carrier has a rounded concave fillet,

~~characterised in that~~ wherein

the head part of the ~~functional-element~~ is passed through a hole formed in the ~~plate-like-plate~~ component or is pressed into a recess formed in the plate component and the rivet sleeve is subsequently moved in the axial direction of the ~~functional-element~~ function carrier onto the concave fillet and onto the head part of the ~~functional-element~~ function carrier, whereby the tubular region of the rivet sleeve is deflected radially outwardly by the concave fillet into an anchoring position in which the free end of the tubular region projects radially beyond the head part of the ~~functional-element~~ function carrier.

24. (Currently Amended): Method in accordance with claim 23,

~~characterised in that~~ wherein

the free end of the tubular region is pressed into the hole wall of the component by the deformation of the tubular region of the rivet sleeve and thus prevents the extraction of the function carrier out of the recess of the component receiving the head part of the ~~functional-element~~ function carrier.

25. (Currently Amended): Method in accordance with claim 23,

~~characterised in that~~ wherein

through the deformation of the tubular region of the rivet sleeve, a groove is formed between the deformed tubular region and the ~~ring-like~~ ring region which receives the material of the marginal edge of the hole of the component.

26. (Currently Amended): Method in accordance with claim 25,

~~characterised in that~~ wherein

the ~~ring-like~~ ring region of the rivet sleeve is deformed into a ring groove formed in the shaft part directly ahead of the concave fillet.

27. (Currently Amended): Method in accordance with claim 23,

~~characterised in that~~ wherein

the rivet sleeve is moved in the axial direction towards the concave fillet while an axial force in the opposite direction is produced on the shaft part of the ~~functional element~~ function carrier.

28. (Currently Amended): Method in accordance with claim 23,

~~characterised in that~~ wherein

the ~~ring-like~~ ring region of the rivet sleeve has an internal thread which is screwed onto an external thread provided on the shaft part of the ~~functional element~~ function carrier and the radial deformation of the tubular region of the rivet sleeve is produced by a relative rotation between the rivet sleeve and the ~~functional element~~ function carrier.

29. (Currently Amended): Method in accordance with claim 23,

~~characterised in that~~ wherein

an auxiliary tool provided with a thrust bearing is used for the deformation of the rivet sleeve, with the thrust bearing having a lower ring, the end face of which remote from the rolling elements presses against the end face of the ~~ring-like~~ ring region of the rivet sleeve and the other ring of which is provided on a rotatable sleeve which has an internal thread which cooperates with an external thread provided on the shaft part of the ~~functional element~~ function carrier, with a relative rotation of the sleeve which cooperates with the outer thread of the shaft part of the ~~functional element~~ function carrier leading to an axial movement of the thrust bearing and of the rivet sleeve and through this to a deformation of the rivet sleeve at the concave fillet of the ~~functional element~~ function carrier.

30. (Currently Amended): Tool for the insertion of a function carrier into a ~~plate-like~~ plate component, wherein the ~~functional element~~ function carrier includes shaft and head parts and a rivet sleeve and wherein the rivet sleeve is movable in the axial direction of the shaft part along the shaft part,

~~characterised in that~~ wherein

the tool has two coaxial devices rotatable relative to one another, with the inner device being capable of being brought into a rotationally fixed connection with the shaft part of the ~~functional element~~ function carrier and the outer device being capable of being brought into rotationally fixed connection with the rivet sleeve or with an auxiliary

tool which presses onto the rivet sleeve, with either the ~~ring-like~~ ring region of the rivet sleeve or the outer device having an inner thread which cooperates with an outer thread provided on the shaft part of the ~~functional element~~ function carrier.

31. (Currently Amended): Tool in accordance with claim 30,

~~characterised in that~~ wherein

the auxiliary tool is formed as a thrust bearing, with the thrust bearing having a lower ring, the end face of which remote from the rolling elements presses against the end face of the ~~ring-like~~ ring region of the rivet sleeve and the other ring of which is provided on a rotatable sleeve which has an internal thread which cooperates with an external thread provided on the shaft part of the ~~functional element~~ function carrier, with a relative rotation of the sleeve which cooperates with the outer thread of the shaft part of the ~~functional element~~ function carrier leading to an axial movement of the thrust bearing and of the rivet sleeve and through this to a deformation of the rivet sleeve at the concave fillet of the ~~functional element~~ function carrier.

32. (Currently Amended): Function carrier in accordance with claim 1,

~~characterised in that~~ wherein

the ~~ring-like~~ ring region of the rivet sleeve has noses and/or recesses at a side confronting the component to provide a security against rotation.